1. Record Nr. UNINA9910155548603321 Autore Mei Hong Titolo Internetware: A New Software Paradigm for Internet Computing / / by Hong Mei, Jian Lü Singapore:,: Springer Singapore:,: Imprint: Springer,, 2016 Pubbl/distr/stampa Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XXVIII, 442 p. 191 illus., 117 illus. in color.) 005.1 Disciplina Soggetti Software engineering Operating systems (Computers) Architecture, Computer Computer system failures Software Engineering **Operating Systems** Computer System Implementation System Performance and Evaluation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto 1. Internetware: A shift of software paradigm -- 2. Technical Framework for Internetware: An Architecture Centric Approach -- 3. On environment-driven software model for Internetware -- 4. A Software Architecture Centric Self-adaptation Approach for Internetware -- 5. Requirements Model Driven Adaption and Evolution of Internetware --6. Runtime Recovery and Manipulation of Software Architecture of Component-based Systems -- 7. Supporting Runtime Software Architecture: A Bidirectional-Transformation-Based Approach -- 8. Low-disruptive Dynamic Updating of Internetware Applications -- 9. Specification and Monitoring of Data-centric Temporal Properties for Service-based Internetware systems -- 10. Runtime Detection of the Concurrency Property in Asynchronous Pervasive Computing

Environments -- 11. A Software Architecture Centric Engineering Approach for Internetware -- 12. Toward Capability Specification of Internetware Entity Based on Environment Ontology -- 13. Feature-driven requirement dependency analysis and high-level software

design -- 14. rCOS: A Refinement Calculus of Internetware Systems -- 15. Refactoring Android Java Code for On-Demand Computation Offloading -- 16. Towards Architecture-based Management of Platforms in Cloud -- 17. Golden Age: On Multi-Source Software Update Propagation in Pervasive Networking Environments -- 18. GreenDroid: Automated Diagnosis of Energy Inefficiency for Smartphone Applications.

Sommario/riassunto

This book presents a comprehensive introduction to Internetware, covering aspects ranging from the fundamental principles and engineering methodologies to operational platforms, quality measurements and assurance and future directions. It also includes guidelines and numerous representative real-world case studies that serve as an invaluable reference resource for software engineers involved in the development of Internetware applications. Providing a detailed analysis of current trends in modern software engineering in the Internet, it offers an essential blueprint and an important contribution to the research on software engineering and systems for future Internet computing.